

**AMENDMENTS THE SPECIFICATION**

Applicants amend the Specification as follows:

Replace the paragraph spanning pages 5-7 with the following:

Examples of plants whose oil or fat compositions are actually modified by genetic recombination include: (i) lauric acid-producing rapeseed (transgenic rapeseed obtained by isolating a medium-chain acyl-ACP thioesterase gene from laurel, which contains a relatively large amount of lauric acid, and then by introducing the gene, which specifically acts on C12:0-ACP (Acyl Carrier Protein) and releases lauric acid, into rapeseed by legating ligating it to the promoter of a napin gene that encodes a storage protein of the rapeseed; see Document 2: Science, 257, p72 (1992)); (ii) high stearic acid content rapeseeds (recombinant rapeseeds with an increased stearic acid content as high as 40%, produced by introducing an antisense gene to suppress expression of a C18:0-ACP desaturase gene; see Document 3: Proc. Natl. Acad. Sci. U.S.A., 89, p2624 (1992)); (iii) high erucic acid (C22:1) content rapeseeds (rapeseeds containing as high as 90% erucic acid, produced by introducing an LPAAT gene of yeast; see document 4: Plant Cell, 9, p909 (1997)); (iv) high oleic acid content soybeans (soybeans with an increased oleic acid content as high as 80% compared with the original level of about 23%, produced by suppressing the expression of  $\Delta$ 12 desaturase gene Fad2 in soybean seeds and thereby suppressing the synthetic pathway producing linoleic acid from oleic acid, wherein a promoter derived from the  $\beta$ -conglycinin gene encoding a soybean seed storage protein was used as the Fad2-controlling promoter); and (v)  $\gamma$ -linolenic acid producing rapeseeds (rapeseeds produced by introducing  $\Delta$ 6 desaturase gene isolated from *Borago officinalis*; see Document 5: Proc. Natl. Acad. Sci. U.S.A., 94, p4211 (1997)). Further, it has been reported that arachidonic acid and EPA were produced in flax plants by expressing Bacillariophyceae-derived  $\Delta$ 6 desaturase gene and  $\Delta$ 5 desaturase gene and a *physcomitrella patens*-derived chain elongase gene (see Document 6: J. Biol. Chem. 278, p35115, (2003)).

ATTORNEY DOCKET NO.: 47635-0025-00-US (227671)

Application No.: 10/583,084

Response to Office Action mailed: December 29, 2009

Response Dated: April 9, 2010

Page 3

Replace the last full paragraph on page 40 with the following

The method of introducing the recombinant expression vector into a plant cell is not particularly limited, and conventional methods can be suitably used according to the type of plant cell. Specifically, a method using Agrobacterium, or a method in which the recombinant expression vector is directly introduced into a plant cell may be used, for example. As a method using Agrobacterium, *Transformation of Arabidopsis thaliana by vacuum infiltration* (<http://www.bch.msu.edu/pamgreen/protocol.htm>) may be used, for example.